



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,231	03/06/2006	Hideaki Watanabe	6404-0005WOUS	7544

35301 7590 08/18/2010  
MCCORMICK, PAULDING & HUBER LLP  
CITY PLACE II  
185 ASYLUM STREET  
HARTFORD, CT 06103

EXAMINER

REESE, ROBERT T

ART UNIT

PAPER NUMBER

3654

MAIL DATE

DELIVERY MODE

08/18/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/564,231

**Applicant(s)**

WATANABE ET AL.

**Examiner**

ROBERT T. REESE

**Art Unit**

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5 and 7 is/are allowed.
- 6) ☒ Claim(s) 2, 6 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

The amendment filed April 28, 2010, has been entered. Claims 3, 6, 7, and 8 have been amended. Claim 1 was withdrawn in a prior action. Therefore, claims 2-8 are currently pending in the application.

***Drawings***

1. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. It should be noted that figure 5 is identified in paragraph 3 of the specification as showing a portion of "a conventional isolation damper pulley." As such, it is very clearly prior art, regardless of the intended purpose of citing it in the specification and drawings. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 2, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Allport (GB 2,374,654).

As per claim 2, Allport discloses: an isolation damper pulley (1) attached to a crankshaft (page 1, paragraph 2) of an engine, comprising: a damper unit (2) including a hub (5) having a mounting hole (13) for placement on said crankshaft, an inside cylindrical portion (6) provided to said hub so as to be concentric with the center axis of said mounting hole, and an annular mass body (16) attached to an outside cylindrical portion (7) provided to said hub via a first elastic member (19); a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and that is disposed outside said annular mass body (as depicted in Figure 2), and a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction; a second elastic member (23) whose one end is fixed to a side of said damper unit (2), whose other end is fixed to a side of said pulley portion (3), and to which a pre-compression is applied axially; and a pressing unit (4) having a cylindrical fitting portion (8) concentric with said center axis, and a pressing portion extending radially from said cylindrical fitting portion, said cover portion being axially pressed by said pressing portion, and said pressing unit applying an axial-directional pre-compression to said second elastic member (This pre-compression would be a result of the position of the fitting member, the second elastic member, and the cover), wherein said cylindrical fitting portion of said pressing unit is axially press-inserted into said inside cylindrical portion of said damper so as to be fitted coaxially (depicted in Figure 2), and a fixing portion of said pressing unit is capable of being adjusted axially with respect to said

cylindrical portion of said damper unit (depicted in Figure 2, and determined by axial location on the inside cylindrical portion that the cylindrical portion is fitted).

As per claim 6, Allport discloses: an isolation damper pulley (1) attached to a crankshaft (page 1, paragraph 2) of an engine, comprising: a damper unit (2) including a hub (5) having a mounting hole (13) for placement on said crankshaft, a cylindrical first fitting portion (6 in conjunction with 7) provided to said hub so as to be concentric with a center axis of said mounting hole, and an annular mass body (16) attached to an outside cylindrical portion provided to said hub via a first elastic member (19); a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and which is disposed outside said annular mass body (as depicted in figure 2), and a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction; a second elastic member (23), whose one axial-directional end is supported by said cover portion (as depicted in figure 2) and to which a pre-compression is applied axially (This pre-compression would be an inherent result of the position of the fitting member, the second elastic member, and the cover); a supporting unit having a second fitting portion (8) concentric with said center axis and supporting the other axial-directional end of said second elastic member; and a pressing unit (4) having a third fitting portion (11) concentric with said center axis and a pressing portion extending radially from said third fitting portion (Inner surface of 11), said pressing portion pressing axially said cover portion to apply an axial-directional pre-compression to said second elastic member (Depicted in figure 2), wherein

Art Unit: 3654

said second fitting portion and said third fitting portion are press-inserted into said first fitting portion without being fitted to each other, thereby being fitted to said first fitting portion (depicted in figure 2) and a fixing portion of said pressing unit is capable of being adjusted axially with respect to said first fitting portion of said damper unit (Depicted in figure 2 at the interface of 6 and 8).

As per claim 8, Allport discloses: a manufacturing method for an isolation damper pulley (1) attaching to a crankshaft (page 1, paragraph 2) of an engine (the method of manufacturing is implied by the construction of the product), the method comprising the steps of: preparing a damper unit (2) including a hub (5) having a mounting hole (13) for placement on said crankshaft, a cylindrical first fitting portion (8) provided to said hub so as to be concentric with a center axis of said mounting hole, and an annular mass body (16) attached to an outside cylindrical portion provided to said hub via a first elastic member (19); preparing a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and which is disposed outside said annular mass body (as depicted in figure 2), a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction and a supporting one axial-directional end of a second elastic member (23), and a supporting means provided with a second fitting portion (6 and 7) concentric with said center axis and supporting the other axial-directional end of said second elastic member (depicted in figure 2); press-inserting axially said second fitting portion into said first fitting portion and fitting coaxially said second fitting portion to said first fitting

Art Unit: 3654

portion (depicted in figure 2); and press-inserting axially a third fitting portion (11) into said first fitting portion (8), a pressing means having a pressing portion (4) opposed to said cover portion and a third fitting portion (11) concentric with said center axis, applying axially a predetermined pre-compression to said second elastic member by said supporting means and said pressing means (This pre-compression would be a result of the position of the fitting member, the second elastic member, and the cover), and fitting coaxially said third fitting portion (11) to said first fitting portion (near element 9) without being fitted in said second fitting portion at a position where an axial-directional isolation length between an end surface of said damper unit and said pulley groove becomes a predetermined length (depicted in figure 2).

***Allowable Subject Matter***

4. Claims 3, 4, 5 and 7 are allowed.

***Response to Arguments***

5. Applicant's arguments filed April 28, 2010, have been fully considered but they are not persuasive. Regarding the objection to figure 5, as stated above, it should be noted that figure 5 is identified in paragraph 3 of the specification as showing a portion of "a conventional isolation damper pulley." As such, it is very clearly prior art, regardless of the intended purpose of citing it in the specification and drawings.

With regard to claim 2, the Applicant has raised four issues. The first is the contention that Allport does not disclose a "hub having a mounting hole for the placement on a crankshaft" for element 6. Figure 2 of Allport depicts a

Art Unit: 3654

central aperture, element 5, which is enclosed by element 6. At the bottom of page 3 of the Allport reference the purpose of central aperture 5 is identified as "for receiving the rotary shaft." This description clearly meets the recited limitation of claim 2.

The second issue is the contention that the hub member 8 is axially pre-inserted into said inside cylindrical portion, which is identified as element 6. As shown in figure 2, element 8 is placed into element 6, with element 8 enclosed in an axial direction by element 6. This axial enclosure meets the structural limitation of the cylindrical fitting portion (9) being placed into the cylindrical portion (6) of the damper.

The third issue regards the cover portion being axially pressed by the pressing portion, and the pressing unit applying axial pre-compression to the second elastic unit. As discussed in the rejection, and as depicted in figure 2 of the Allport reference, the cover portion, which is near element 3, is adjacent to the pressing portion, in this case the horizontal surface coming off element 4. It is construed that the relationship between would be pressing against the cover portion, since the whole assembly is bolted together. The pressing unit is also adjacent to element 23, which is identified as the second elastic unit. This interface is also construed as one of compression for the same reason, a view that is supported by the text of the Allport reference (page 5), with the statement that "the resilient member 22 (of which element 23 is a part, see figure 1) is disposed between the first and second annular members 2, and 3 (note that in figure 2 that element 2 is part of element 4) so as to be compressed in a



Art Unit: 3654

circumferential direction relative to the drive shaft." The mentioned parts are identified as putting the second elastic unit in compression, and it is construed based on the mentioned compression and the arrangement depicted in figure 2, that the identified parts are pressing onto element 23, putting it into a state of pre-compression.

The final issue regards the adjustability of the cylindrical fitting portion (element 8) and the inside cylindrical fitting portion (element 6). As can be seen in figure 2, these two elements are in sliding contact with each other, and are deemed to be adjustable during the course of manufacturing.

Regarding claim 6, the Applicant has raised the issue regarding a first fitting portion, a third fitting portion, and a fixing portion. The first fitting portion has been identified as element 8, the third as element 11, and the fitting portion as studs 30 and 31. It is the position of the Examiner that element 6 meets the limitation of the cylindrical first fitting portion, regardless of whether or not it is part of a larger component.

Regarding claim 8, the Applicant has raised two issues. The first is if a guide bearing (11) can be regarded as a fitted portion. Since the bearing is fitted between elements 8 and 10, it is deemed to meet the required limitation. The second issue regards the differences of element identification between claims 6 and 8. Claim 8 is an independent claim, and hence not dependent upon claim 6. As such, the identification of elements in claim 8 need not be the same as used in claim 6, and as such is deemed proper.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT T. REESE whose telephone number is (571) 270-5794. The examiner can normally be reached on M\_F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael R. Mansen can be reached on (571) 272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael R Mansen/  
Supervisory Patent Examiner, Art Unit 3654

RTR